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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|--------------------------------|------------------|
| 10/750,949 | 01/05/2004 | Bulent Dervisoglu | 41567-199588 | 2063 |
| 26694 | 7590 | 08/13/2004 | | |
| VENABLE, BAETJER, HOWARD AND CIVILETTI, LLP P.O. BOX 34385 WASHINGTON, DC 20043-9998 | | | EXAMINER CHAUDRY, MUJTABA M | |
| | | | ART UNIT 2133 | PAPER NUMBER |

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/750,949

Applicant(s)

DERVISOGLU ET AL.

Examiner

Mujtaba K Chaudry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-31 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following invention is required under 35 USC 121

1. Claims 1-10 are drawn to computing compressed scan-in values for a scan chain, classified in 714/738.
2. Claims 11-12 and 23 are drawn to loading scan chain with pseudo-random data, classified in 714/728.
3. Claims 13-14 and 24-28 are drawn to scan flip-flop configuration, classified in 714/727.
4. Claims 15-22 and 29-31 are drawn to distributing control signals for scan chain, classified in 714/731.

The inventions are distinct, each from the other because of the following reasons:

Inventions of Group I, drawn to computing compressed scan-in values for a scan chain and Group II, drawn to loading scan chain with pseudo-random data are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because it is possible to load scan chain with pseudo-random data or compressed data. The subcombination has separate utility such as in a single network environment or within another circuit.

Inventions Group I, drawn to computing compressed scan-in values for a scan chain and Group III, drawn to scan flip-flop configuration are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because computing compressed scan data does not require a scan flip-flop. The subcombination has separate utility such as in a single network environment or within another circuit.

Inventions Group I, drawn to computing compressed scan-in values for a scan chain and Group IV, drawn to distributing control signals for scan chain are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because computing compressed scan data does not necessarily require the distribution of control signal for scan chains. The subcombination has separate utility such as in a single network environment or within another circuit.

Inventions of Group II, drawn to loading scan chain with pseudo-random data and Group III, drawn to scan flip-flop configuration are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that

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the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because a scan chain may be loaded in various configurations. The subcombination has separate utility such as in a single network environment or within another circuit.

Inventions of Group II, drawn to loading scan chain with pseudo-random data and Group IV, drawn to distributing control signals for scan chain are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because loading scan chain with pseudo-random data does not necessarily require the distribution of control signal for scan chains. The subcombination has separate utility such as in a single network environment or within another circuit.

Inventions of Group III, drawn to scan flip-flop configuration and Group IV, drawn to distributing control signals for scan chain are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because scan flip-flop configuration does not necessarily require the distribution of

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control signal for scan chains. The subcombination has separate utility such as in a single network environment or within another circuit.

Conclusion

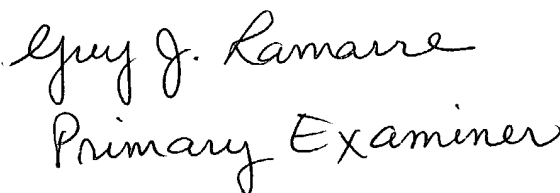
Any inquiries concerning this communication should be directed to the examiner, Mujtaba Chaudry who may be reached at 703-305-7755. The examiner may normally be reached Mon – Thur 7:30 am to 4:30 pm and every other Fri 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, please contact the examiner's supervisor, Albert DeCady at 703-305-9595. The fax phone number for the organization where this application is assigned is 703-746-7239.

Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the receptionist at 703-305-3900.



Mujtaba Chaudry
Art Unit 2133
July 26, 2004



Guy J. Ramarre
Primary Examiner